

APPENDIX

Notes for FOMC Meeting

September 22, 1987

Sam Y. Cross

This year there have been two significant turning points for the dollar.

The first was in mid-May. Dealers became impressed both by the scale and persistence of central bank intervention and also by the use of monetary policy--by the United States, Japan, and to some extent Germany--to support the exchange rates. We then had three months of dollar stability, even mild recovery, and restored some sense of two-way risk in the exchange market.

The second turning point occurred at the time of the last FOMC meeting. The dollar's recovery ended abruptly with the announcement of very disappointing United States trade figures for June. This confirmation of a continuing large U.S. deficit together with little evidence of more satisfactory growth in the surplus countries of Europe and elsewhere, focused market attention once again on the slow pace of international adjustment and the implications for exchange rates. In that environment, traders felt that the authorities had little choice but to allow the dollar to decline. With psychology so negative, the dollar fell abruptly and, within just a couple of weeks after the release of the trade statistics, dollar exchange rates were back near the lows of mid-May.

The Desk did undertake some modest intervention during that period of decline. At various times in late August in very

thin, afternoon trading in New York, the dollar/yen rate sagged to levels at which we and the Treasury felt it appropriate to intervene under the commitments of the Louvre agreement to promote greater exchange rate stability. The Desk purchased modest amounts of dollars against yen on three occasions in operations that were conducted quietly to avoid inviting selling that otherwise might not have appeared. On August 28, the Bank of Japan, the Bundesbank, and several other European central banks conducted a visible, moderately-sized concerted intervention. We would have liked to have joined in later that day in New York, in a show of coordinated intervention. But as it happened, the dollar stayed above the level at which we were prepared to operate all day.

A few days later, on September 1 and 2, the Desk entered the exchange market to sell yen, operating in a visible way to show our presence. On September 2, the pressures against the dollar became more acute vis-a-vis the mark than the yen. Once the mark moved through the psychologically important DM 1.80 level against the dollar, a sharp selloff occurred in both the U.S. bond and stock markets. With disorderly conditions spreading across all financial markets the Desk intervened, buying \$50 million against marks on behalf of the Federal Reserve while continuing its operation in yen.

In all, the Desk intervened in marks on only one day, for \$50 million. In yen we intervened on five days during late August and early September, purchasing a total of \$389.5 million.

Of the yen amount, \$169.75 million was purchased on behalf of the System and \$219.75 million for the Treasury. The Desk's operations were undertaken in close coordination with central banks in Europe and Japan. Total U.S. intervention during the period since the last FOMC meeting, was just under \$450 million, compared with just under by Germany, and by Japan.

On September 4, when the Federal Reserve raised the discount rate by one-half of a percentage point, the first reactions heard in the market were that the step would provide little support to dollar exchange rates. But the move did serve to widen short-term interest rates favoring the dollar. Subsequently the dollar has continued to hold above its early September lows, even though we got another set of dismal trade figures ten days ago, and we have not intervened since the discount rate increase.

One question being asked in the market is why the dollar has remained stable in the past two weeks given the persistent negative psychology. Some traders tell us they think it is partly because the U.S. Administration no longer has much freedom to allow it to move down further. That is to say, that the Administration faces a dilemma--if they should pursue a strategy of allowing the dollar to decline further to deflect protectionism, it would risk further substantial rises in U.S. interest rates, given the bond market's recent sensitivity to movements in the exchange rate, as well as add to inflation

concerns. In these circumstances, market participants at present seem unwilling to extend their currency positions very far in either direction. The dollar nevertheless remains vulnerable to downward pressures.

In the seven months since the Louvre, we have intervened in amounts totaling about \$5.3 billion in purchases of dollars and \$661 million in sales of dollars. There has been somewhat greater stability in rates--at the time of the Louvre the dollar traded at DM 1.82-1/2 and Y 153-1/2. There will be an opportunity for a reassessment of this agreement during this week's meeting of the industrial countries concurrent with the IMF/World Bank meetings.

In terms of our present resources, the Federal Reserve System now holds about \$7.5 billion equivalent of marks and \$150 million of yen. The Treasury has \$4.2 billion equivalent of marks and almost \$2 billion equivalent of yen. In our recent operations, the Treasury assumed more of the yen sales in light of their greater yen resources and we assumed the responsibility for the sales of marks, in which our balances are larger.

PETER D. STERNLIGHT
NOTES FOR FOMC MEETING
SEPTEMBER 22, 1987

Following the last Committee meeting, the Domestic Desk initially sought to maintain unchanged conditions of reserve availability, indexed by a continued \$500 million level of borrowing. By early September, against a backdrop of persistent downward pressure on the dollar, and related concerns about inflation, while the economy showed signs of continuing expansion and moderate money growth was resuming, the Desk began to incorporate a \$600 million borrowing level in the reserve paths. Close on the heels of this change, the discount rate was increased one-half percentage point to 6 percent.

Meantime, in late August and early September market anticipations in response to the weakening dollar helped to begin achieving the modest firming sought by the System. Federal funds edged up from the 6-5/8 percent average of the previous intermeeting period to 6-3/4 and 6-7/8 percent. To some extent a sense of less accommodative reserve provisions and of a possible discount rate increase began to be built in to the thinking of market participants. Thus when the discount rate was raised, funds rose further but not by the full 1/2 percent official rate change. An additional factor muting the funds market reaction to the discount rate move and higher borrowing allowance was the happenstance of misses in some reserve estimates--most notably an overestimate of required reserves in the September 9 period.

Against that background, funds traded largely in a 7 to 7-1/4 percent range on the days following the discount rate change.

It was anticipated that the rate would push higher with the approach of the mid-September corporate tax date, but this did not happen to the degree expected--perhaps because the Desk's provision of reserves, with some help from market factors, kept pace with the needs deriving from higher Treasury balances. This past Friday, we deliberately refrained from meeting a sizable remaining projected reserve need as funds were trading comfortably at 7 percent and we were concerned that overt Desk action to add reserves could provide misleading signals to the market. By yesterday, some expected firmness began to show through and we moved to meet the remaining need--though there is a question whether we'll be able to meet it all.

In the two-week reserve period ended August 26, borrowing ran ahead of the then \$500 million path by about \$90 million, largely because of some unexpectedly high demand for excess reserves. Ironically, in the next reserve period, when we were aiming for the \$600 million borrowing area, borrowing came in at about \$475 million--in good part, I believe, because of the aforementioned over-estimate of required reserves. So far in the first 11 days of the current period, borrowing has averaged a relatively light \$460 million--but there may well be a bulge at the end that brings us close to or above the \$600 million path.

Faced with sizable projected reserve needs even in the early part of the period and towering needs following the September tax date, the Desk made large purchases of securities during the period. Outright holdings were increased by about \$8-1/2

billion, including a record \$4.1 billion purchase of coupon issues in the market, a \$2.6 billion bill purchase in the market and about \$1.8 billion of bills bought from foreign accounts. Short-term customer repos were arranged frequently, and on September 17, once we got a first reading on the corporate tax flows, about \$7 billion in 4- and 7-day repos were executed. Substantial additional multi-day and overnight agreements were put on yesterday to cope with the reserve effect of very high Treasury balances. We still don't have a final figure on the mid-month corporate tax receipts but the range of estimates has narrowed to about \$20-21 billion, fairly close to earlier staff estimates and well within the wide \$15-32 billion range of market estimates.

Operations in the period ahead will again be heavily influenced by Treasury balance developments, and in turn this will depend to a large extent on the timing of debt ceiling action. At this point, it seems likely that the Treasury will have to pay down an entire bill issue this coming Thursday, September 24, while the 2- and 4-year notes maturing on the 30th are also a question mark. An absolute deadline is October 1, when additional bills mature and heavy Government pension expenditures are due; without an ability to sell debt by that time, the Treasury is expected to run out of funds.

Market interest rates rose across a broad front during the period, both before and after the discount rate move. Before the official rate rise, market rates increased chiefly in response to

disappointing trade figures which contributed to a weakening dollar and related concerns about inflation and diminished foreign interest in the U. S. market. Higher rates abroad were also an adverse factor. Following the discount rate move, short-term rates rose further about as would be expected, while long-term rates also pushed higher for a time--contrary to some past episodes when evidence of monetary restraint seemed to encourage the longer term markets. One difference this time appeared to be that, at least among domestic market participants, a widespread conviction remained that the dollar is likely to decline further in time--a view that was held even when the dollar tended to stabilize after the discount rate rise. After a time, the bond market came back from its lows, but it has been an uneasy recovery, lacking broad retail participation. It is noteworthy that the market was encouraged late last week, by reports of progress on a fiscal restraint package, and failure to reach some agreement would be a negative even though many observers express skepticism on the prospects. Business news during the period was reasonably in line with expectations of moderate economic growth continuing and elicited only modest reactions. At times the market was encouraged by actual current price developments but an underlying concern about future inflation prospects remained, tied to worries about the dollar's vulnerability and a sense of increased resource use at home.

In all, rates on intermediate and longer-term Treasury issues rose about 70 - 85 basis points over the interval. The

yield on new 30-year Treasury bonds, which was around 8.80 percent the day before the last meeting, rose to about 9.40 percent just before the discount rate increase, subsequently touched as high as 9-3/4 and then recovered irregularly to close yesterday at around 9.60 percent. Treasury borrowing in the coupon area was a relatively moderate \$9-1/2 billion over the period.

In the bill market, yields on actively traded issues rose about 50 - 65 basis points, while the Treasury raised about \$1 billion in this sector of the market. In the most recent bill auction, a week ago Monday, the 3- and 6-month issues went at 6.32 and 6.64 percent, up 35 and 52 basis points from the rates just preceding the last meeting date. No auction was held yesterday because expiration of the temporary debt ceiling would preclude delivery of the new bills on September 24. Treasury also announced late yesterday the postponement of auctions for 2-, 4- and 7-year notes this week.

As to the current state of market sentiment, I would describe it as "uneasy". Many analysts seem to feel that the upward push in rates before and shortly after the discount rate rise was overdone, and this led to some technical short-covering rebounds. But as noted earlier, broad investor participation has been conspicuously absent as investors still eye the dollar and other factors warily. Given the huge swings in reserve positions imposed by Treasury balances and the frailties of projections, the markets have only an approximate impression at this point of

the degree of reserve pressure currently being sought by the System. My impression is that most analysts' expectations currently center on a borrowing level around \$500 or perhaps \$500-\$600 million and a funds rate ranging roughly around 7-1/8 - 7-1/4 percent.

Michael J. Prell
September 22, 1987

FOMC Briefing — The Economic Outlook

Mr. Chairman, I can be relatively brief this morning. The staff's economic forecast has not changed greatly since the last meeting of the Committee. Moreover, the changes we've made were in a sense anticipated by my comments last month that the economy might well be developing a bit more lift than we were showing. The incoming information has indeed led us to mark up real GNP growth in the next few quarters, and with activity at that higher level we are projecting a touch more wage and price inflation in 1988 than we had previously.

Analytically, however, our characterization of the trends in the economy remains the same. Domestic production is being boosted by a lower exchange rate. Domestic demand is being damped by the effect of deteriorating terms of trade on real personal income and by a moderate degree of monetary and fiscal restraint. But the slack in the system has been sufficiently reduced that the rise in import prices associated with the dollar's decline will soon begin to show through more strongly in general wage and price changes. We continue to anticipate that a considerable further depreciation of the dollar will be needed eventually to achieve acceptable external adjustment in the face of at best moderate growth of aggregate demand abroad; thus we have built into the forecast a decline in the dollar of roughly 10 percent at an annual rate. We also foresee a further rise in interest rates, notionally a point or so by next spring for short rates, and less for long-term rates.

Among the pieces of information that led us to raise our near-term projection of GNP growth were the August data on employment and industrial production. Although the increase in nonfarm payrolls last month, at 156,000, was only about half that of the previous month, it confirmed a quite substantial uptrend in jobs. Moreover, with the average workweek up as well, production worker hours in the current quarter look quite ample to support the 3-1/2 percent increase in real GNP that we've estimated. In the manufacturing sector, the payroll numbers were little changed after an upwardly revised July surge, and at this point industrial production appears likely to grow at an annual rate of better than 7 percent this quarter.

Industrial output is gaining despite a sizable decline in auto assemblies. That decline, along with a moderate response on the part of consumers to the enhanced incentives offered on the '87 models, seems likely to put dealers' inventories at manageable levels early this fall. As we indicated in the Greenbook, however, we have projected only a moderate stepup in auto output in the fourth quarter, leaving room for GM to move its production into more realistic alignment with its sales trends either by its own volition or through a brief strike.

With a boost from car and truck sales, this quarter seems likely to be marked by a substantial jump in real consumer spending. We put the overall gain at more than 6 percent at an annual rate in the Greenbook. Yesterday we received the Commerce Department's first estimate of total personal consumption expenditures for August, and with a nominal increase of 1-1/2 percent, after 3/4 of a percent in July, our guesstimate for the quarter appears to be on track.

Business fixed investment is the other area of strength in our current-quarter forecast. The rise in motor vehicle sales is one element, but also important is the strength evident in shipments and orders for nondefense capital goods in recent months. The July level of shipments was 2-1/2 percent above the second-quarter average -- not annualized -- and new orders were up 7 percent. While some of this pickup could well reflect a combination of increased export sales and import substitution, all the signs are that business capital spending is in fact accelerating. To be sure, outlays on structures still look weak, despite rising oil-drilling. But the recent Commerce Department P&E survey and Conference Board appropriations survey suggest that overall fixed investment should be strong in the coming months. In fact, the Commerce survey, taken literally, would point to enormous increases in outlays over the second half; in light of the error history, a literal reading of this series probably would be ill-advised, but the strength was one factor arguing for an upward revision of our forecast.

Not much need be said, I think, about the housing sector. Starts were down slightly in August, and the recent rise in mortgage rates is likely to produce further declines.

As we noted in the Greenbook, inventory investment and net exports constitute wild cards in the short-run picture, given the few data now available. The July inventory figures showed a modest accumulation by nonfarm businesses, and were generally reassuring that stock overhangs should not be an impediment to production growth in the coming months. On the international trade side, the widening of the merchandise trade deficit in July in the published data appears more than explained by normal seasonal

patterns. For the quarter as a whole, largely because of a jump in oil imports, real net exports are not likely to contribute much one way or the other to the change in GNP. However, we expect that component to resume a significant positive contribution in the fall that will continue through 1988.

Turning from the real side to prices, the recent news has been good on the whole. We had been projecting a noticeable deceleration in consumer and GNP prices in the second half, and we've accentuated that somewhat in the current forecast in light of the sharper than anticipated weakening in food prices revealed by the August PPI. Nonetheless, we still show a significant pickup in inflation in 1988, as food prices firm, non-oil import prices continue to rise, and labor costs accelerate.

The intermeeting interval has not provided much information about wage trends. The main statistical indicator was the August hourly earnings figure, which was up 0.4 percent on the month — a sizable gain, but one that followed a few relatively low months. How important the Ford settlement will prove to be is not clear. It does look more generous than the average collective bargaining agreement this year, however, and in that respect it is consistent with our expectation that the downward pressures on real wages will tend to ease in some of the unionized industries where profitability has been improving.

More generally, however, with the unemployment rate remaining at 6 percent last month, somewhat to our surprise, we saw no grounds for altering our forecast of growing compensation gains, with a surge early next year when the social security tax increases add to employers' costs.

Developments in financial markets since the last FOMC meeting have involved important interactions among interest rates, the dollar, and monetary policy. While Mr. Sternlight and Mr. Cross have covered the events of the last few weeks thoroughly, I thought it might be useful as background for the Committee's policy discussion today to begin by reviewing possible interpretations of these developments.

A notable feature of the movement in rates over the intermeeting period has been the nearly equal increase of both short- and long-term rates. While evidence from the yield curve suggests that the market had been expecting an upward interest rate movement at some point, the timing of the movement that actually occurred and the strength of the forces behind it evidently were not entirely anticipated, and market participants apparently revised upward their view of how far interest rates would rise over coming quarters. Some strengthening of inflation expectations was undoubtedly responsible for a portion of this reassessment, given the backdrop of dollar weakness and strength in incoming economic data. However, it also seems likely that not all of the increase can be accounted for by this factor, and that real rates also rose--not only in the short end of the maturity spectrum as a consequence of the monetary policy action, but in longer maturities as well. The drop in the stock market and a firmer tone for the dollar in foreign exchange markets would seem to provide corollary evidence that real rates have moved at least a little higher.

Like the rise in inflation expectations, the rise in real long-term rates seemed to be also related to the drop in the dollar, given the close relationships of movement in the foreign exchange and bond markets at times

over the period, and to the continued good expansion of the economy, as these combined with the actual and expected response of monetary policy. The implications of the increase in real long-term rates depends in part on the strength of these various forces and how they interacted.

To the extent the rise in real long-term rates principally reflected market perceptions that the monetary authorities would restrain policy to hold the dollar level in the face of fundamental downward forces, irrespective of the state of the domestic economy, the implication for the economy would be adverse. The effect of such a policy, if it were sustained, would be to shift the burden of adjusting toward external balance entirely onto reductions in domestic demand, at least initially. Ultimately the domestic price level would need to adjust relative to foreign prices in order to validate the exchange rate. Any tendency for other countries to tighten their monetary policies at the same time would accentuate the pressures on domestic income and demand.

However, the interest rate response to downward pressure on the dollar could also be symptomatic of other underlying forces at work in which a rise in real rates, brought about in part by monetary policy, would be entirely appropriate and consistent with satisfactory economic performance. One such situation might involve a sudden drop in demands for dollar assets, perhaps associated with a loss in confidence in the future purchasing power of the dollar. Under these circumstances, the dollar would be falling more than needed to bring about an orderly adjustment of the current account imbalance, and higher real rates and tighter policy would be needed to restore confidence and contain the inflation pressures that potentially could result. Certainly, this type of shift seemed to play a prominent role in the events

of this spring, and these elements may have been present in the more recent episode.

Another such situation would occur if real rates rose at a time when incoming data already were suggesting price pressures on reasonably strong underlying demands for goods and services. In these circumstances real rates would increase as the dollar weakened because the depreciating dollar was seen as leading to even greater demands and inflation potential, which would have to be restrained by monetary policy. These kinds of interactions seem to have been important in the most recent period. The contrast with 1986 is striking; last year dollar declines did not tend to be associated with rising interest rates, at least in part because they occurred against the backdrop of a weaker economy, higher unemployment rate, and continuing disinflation.

The staff GNP forecast implicitly embodies an analysis of the recent rate movements that emphasizes this last interpretation. As Mike noted, the projection has been revised up a little. Moreover, the pattern of exchange and interest rate movements over coming quarters associated with the forecast is one in which dollar declines are partly resisted with interest rate increases in order to contain inflation pressures. In this regard, it is noteworthy that the latest episode left interest rates higher, but the dollar lower on balance, and so could be interpreted as one step in this ongoing process.

The rise in nominal interest rates in August and September, whatever its source, is expected to damp monetary expansion over the fourth quarter, especially for M1 and M2. The extent of that effect depends not only on the response of the money-holding public, but also on that of the depository institutions as they adjust offering rates on deposits. We presume

that institutions will not be too anxious to raise those rates--particularly for accounts such as NOWs, savings, and MMDAs where rates would have to be increased on all outstanding deposits in order to retain some relatively small portion of the funds. As a consequence, we are projecting relatively subdued M1 and M2 growth over the fourth quarter, with M2 under alternative B registering growth for the year near the 4 percent path experienced to date, and M1 continuing to decelerate from the 6-3/4 growth thus far this year to around 6 percent for the entire year. M3 would not be expected to be affected very much by rate increases in the fourth quarter since credit demands on banks and thrifts are not likely to be reduced in the short-run; as a consequence M3 growth is projected to pick up a little over the balance of the year, putting it close to the 5-1/2 percent lower end of its range for the year.

Four percent M2 growth is not very rapid--in fact, it would be about the slowest calendar year growth recorded since the start of the official series in 1960, and one of the sharpest one-year decelerations. However, there are some aspects of monetary developments this year that may bear on any evaluation of this prospect. First, the performance of M2 seems to reflect some special factors depressing the demand for this aggregate. At least our models do not capture the full deceleration, after taking account of the actual movements of income, market interest rates and deposit offering rates this year; they suggest that 1 to 2 percentage points of the slowing is unaccounted for--perhaps a reflection of changed incentives under the tax law, or possibly the effects of greater interest sensitivity of demand deposits than suggested by historical experience. Second, the slow growth this year follows several years of rapid expansion.

The rise in velocity expected this year is not outside the bounds of historic experience and does not offset the declines of previous years. Third, M1, though decelerating sharply, is expected to grow at a rate--around 6 percent--that is not unusually low by past standards. Indeed, 6 percent M1 growth would be within every annual M1 range established since beginning these exercises in 1979, with the exception of 1982, when it would have been very slightly above the range. Finally, there is little evidence that monetary growth, taken by itself, has been a reliable prediction of future spending in recent years. Any judgment about the appropriateness of money growth, given its recent behavioral characteristics, depends importantly on the judgment made about the accompanying financial and economic developments.

With regard to the choices facing the Committee in the period immediately ahead as specified in the bluebook, it is important to note that while these alternatives are keyed to the \$600 million borrowing assumption now used in constructing reserve paths, the increase in the borrowing objective to this level has neither been achieved nor perceived by the market. In the suggested directive language this is indicated by a reference to the degree of reserve pressure sought in recent weeks--a construction the FOMC has used in similar situations in the past. As a consequence, alternative B in the bluebook actually encompasses a slight firming of reserve and money market conditions. It would not be much of a firming, but probably would be noticeable to the market as federal funds tended to trade more consistently at rates above 7-1/4 percent, and other short-term rates likely also would edge higher. Such a choice could be viewed as reinforcing the effects of the discount rate increase in underlining the Federal Reserve's determination to forestall any intensification

of price pressures. Thus, it might be considered most appropriate if the risks were seen to be on that side. It is quite possible that the slight upward firming would show through to the market at a time when it would not be linked to specific events, such as dollar weakness, that have triggered such moves in the past year. If so it could contribute to an understanding that the ultimate concerns of the Federal Reserve are related to the performance of the domestic economy.

Maintenance of the actual degree of reserve pressures recently prevailing would involve around \$500 million of borrowing, which would be expected to be consistent with money growth between alternatives A and B. This choice could be indicated by retention of the usual directive language involving maintenance of the existing degree of reserve pressures. Such a stance might be considered appropriate in the context of a reasonably steady dollar and no new data suggesting a strengthening of inflation--especially if the outlook for the economy and prices were seen to be more evenly balanced.